Medicine Bow Landscape Vegetation Analysis (LaVA)
Cooperating Agency Meeting
March 6, 2017
9:30 a.m. – 12:30 p.m.

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Medicine Bow Landscape Vegetation Analysis (LaVA) Project
Cooperating Agency Meeting Agenda
March 6, 2017
Holiday Inn – 204 South 30th Street, Laramie, WY
Brown Conference Room
0930 – 1230

MEETING OBJECTIVES:

- Gain an understanding of why the Forest Service believes a landscape-scale analysis is appropriate and timely;
- Discuss the LaVA analysis approach to-date;
- Engage cooperators early in the process to develop a sense of ownership and to work collaboratively to develop a proposal that makes areas more resilient to future disturbance; reduces fire hazards to communities and high-value resources; and provides a sustainable supply of wood and biomass consistent with sound forest management; and
- Determine how to best move forward with cooperating agency support and interaction.

Topic	Presenter	Time
Welcome and Why We're Here	Dennis Jaeger	0930
Introductions and Housekeeping	Melissa Martin	0945
Condition-based NEPA: A Cutting-edge Analysis Approach	Melissa Martin	1000
The Medicine Bow LaVA Analysis: Project Overview	Melissa Martin	1015
BREAK**		**1030**
Process for Determining Potential Treatment Opportunity Areas (TOAs)	Paula Guenther	1100
Questions and Answers: Feedback from Meeting Participants	Group Facilitator: Melissa Martin	1130
Cooperating Agency Engagement • Ideas to ensure a transparent, inclusive process • Next Meeting: Commitment to action	Group Facilitator: Paula Guenther	1200
Wrap-up	Dennis Jaeger	1215
Meeting adjourned		1230

**** We have scheduled a long break to allow meeting participants an opportunity to view project information and to ask questions of Forest Service resource specialists.**

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Condition-based NEPA –
A Cutting-edge Analysis Approach

- What it's Not
- What it Is
- How it Works

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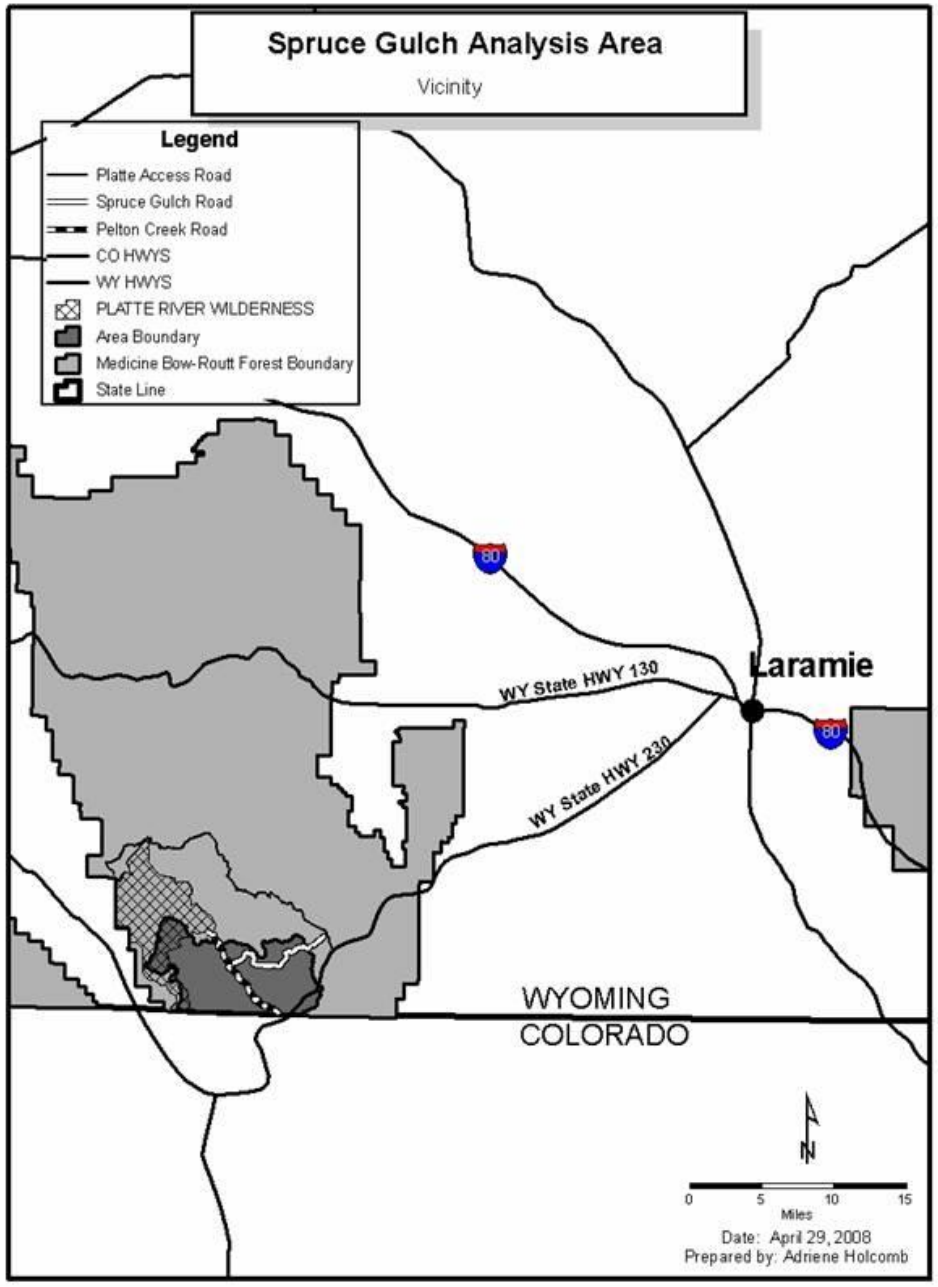
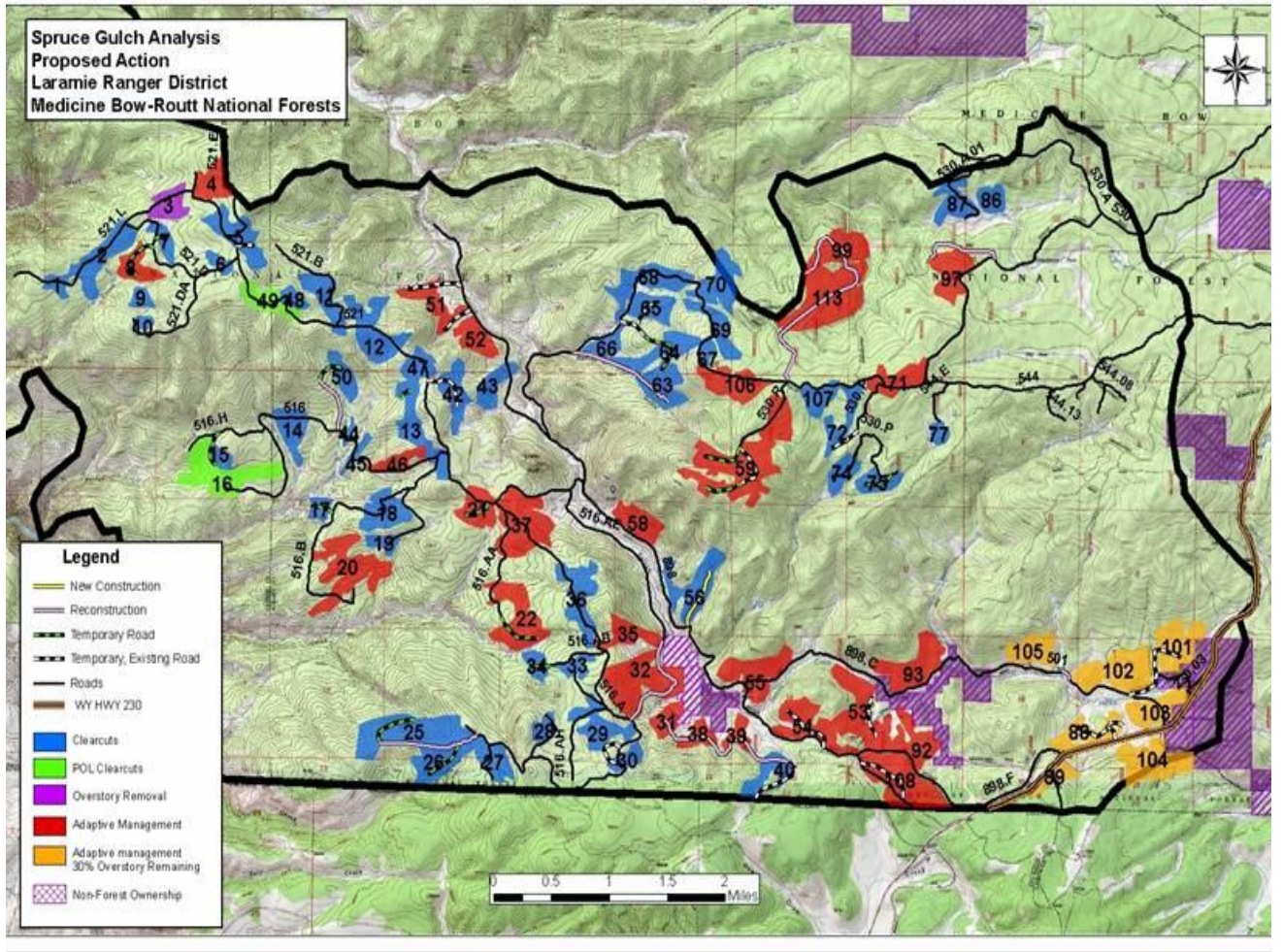
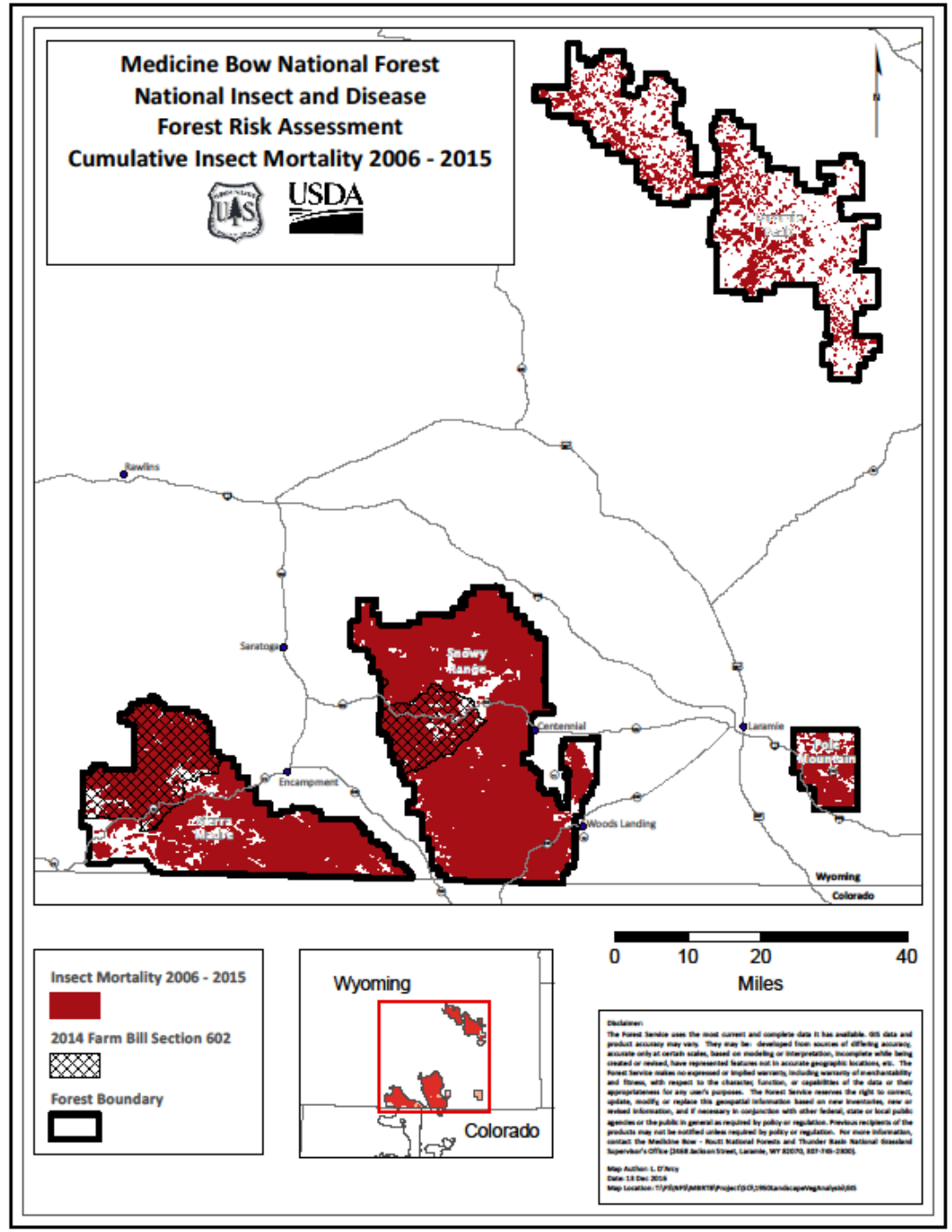


Condition-based NEPA – What it's Not




Medicine Bow National Forest
National Insect and Disease
Forest Risk Assessment
Cumulative Insect Mortality 2006 - 2015
USDA
Rawlins
Saratoga
Encampment
Centennial
Laramie
Woods Landing
Wyoming
Colorado
Insect Mortality 2006 - 2015
2014 Farm Bill Section 602
Forest Boundary
Wyoming
Colorado
0
10
20
40
Miles

Condition-based NEPA – What it Is

- Generally completed at a landscape scale;
- Based on a set of objectives and desired conditions;
- Compare Existing Conditions to Desired Conditions to identify gaps/needs;
- Use gaps to identify a range of treatment caps and options to meet objectives and move toward a Desired Condition
    - **Descriptive in nature:** Where we find condition X, we will do treatment Y to result in condition Z…*using a set of design criteria, mitigation measures, limits on treatments by watershed or other constraints, etc.*, **without necessarily mapping the treatment units**
- Uses existing data sets, spatial layers, and best available science information (BASI) to conduct environmental analysis;
- Results in a decision that is flexible, adaptive, and that commits to completing a comprehensive set of field checks prior to implementation; and
- Relies heavily on strong collaborative relationships, connections to science, and broad agreement about the purpose of the project.

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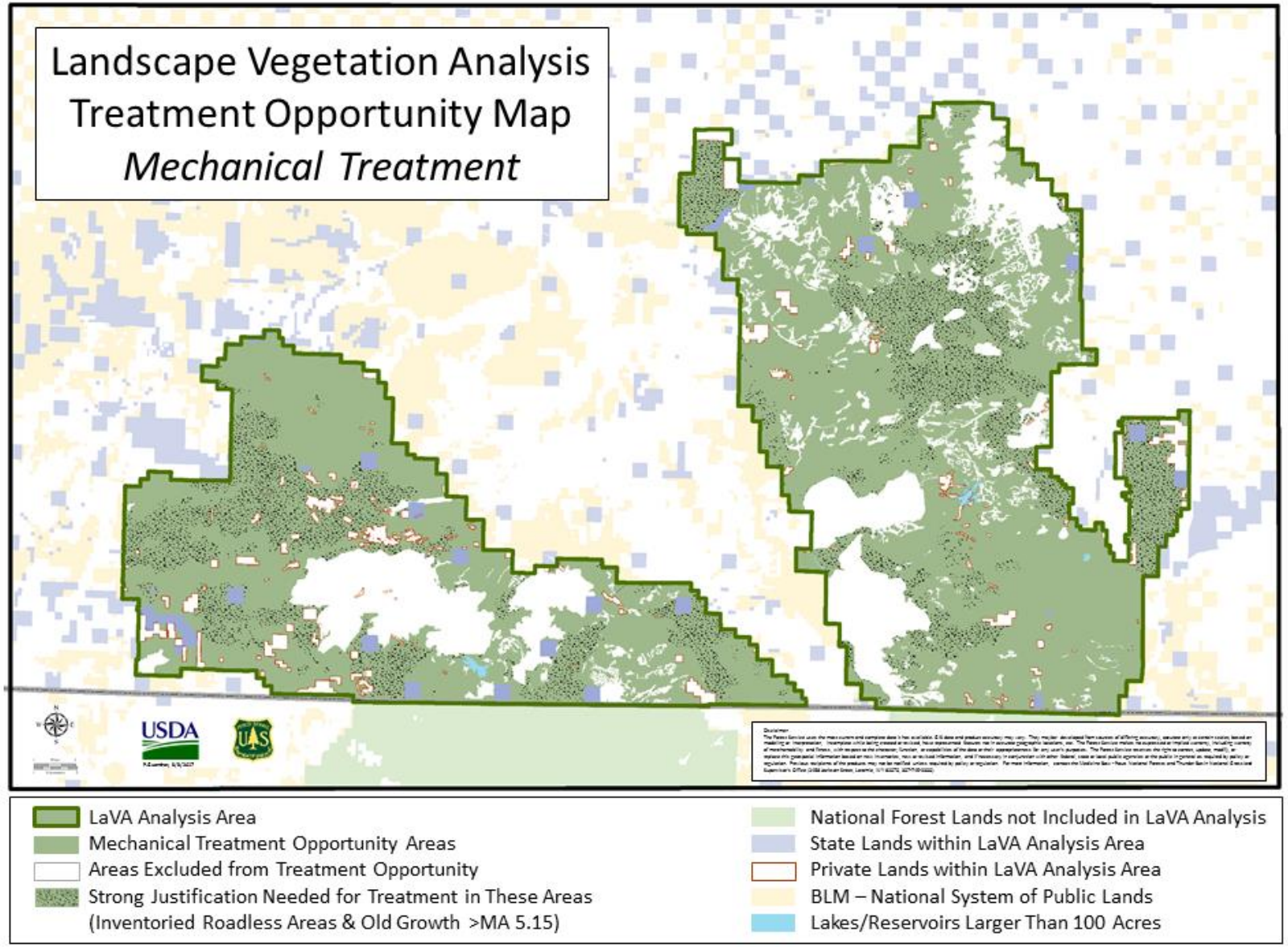
HYPOTHETICAL EXAMPLE OF CONDITION-BASED NEPA



Descriptive Treatments

- Approximately 130,000 acres of lodgepole pine stands are in mature structural stages; Forest Plan desired condition is 80,000 acres.
- Propose to convert up to 50,000 acres of mature stands to young stands over 10-year period.
- Foresters would determine which stands to convert after on-the-ground assessments are completed

How Condition-based NEPA works

- ***NEPA Analysis and Requirements for Site-specificity***
- ***Post-decision validation – unit layout and field work after decision, but before implementation***
- ***Continued Public, Stakeholder, and Cooperating Agency Involvement and Monitoring***

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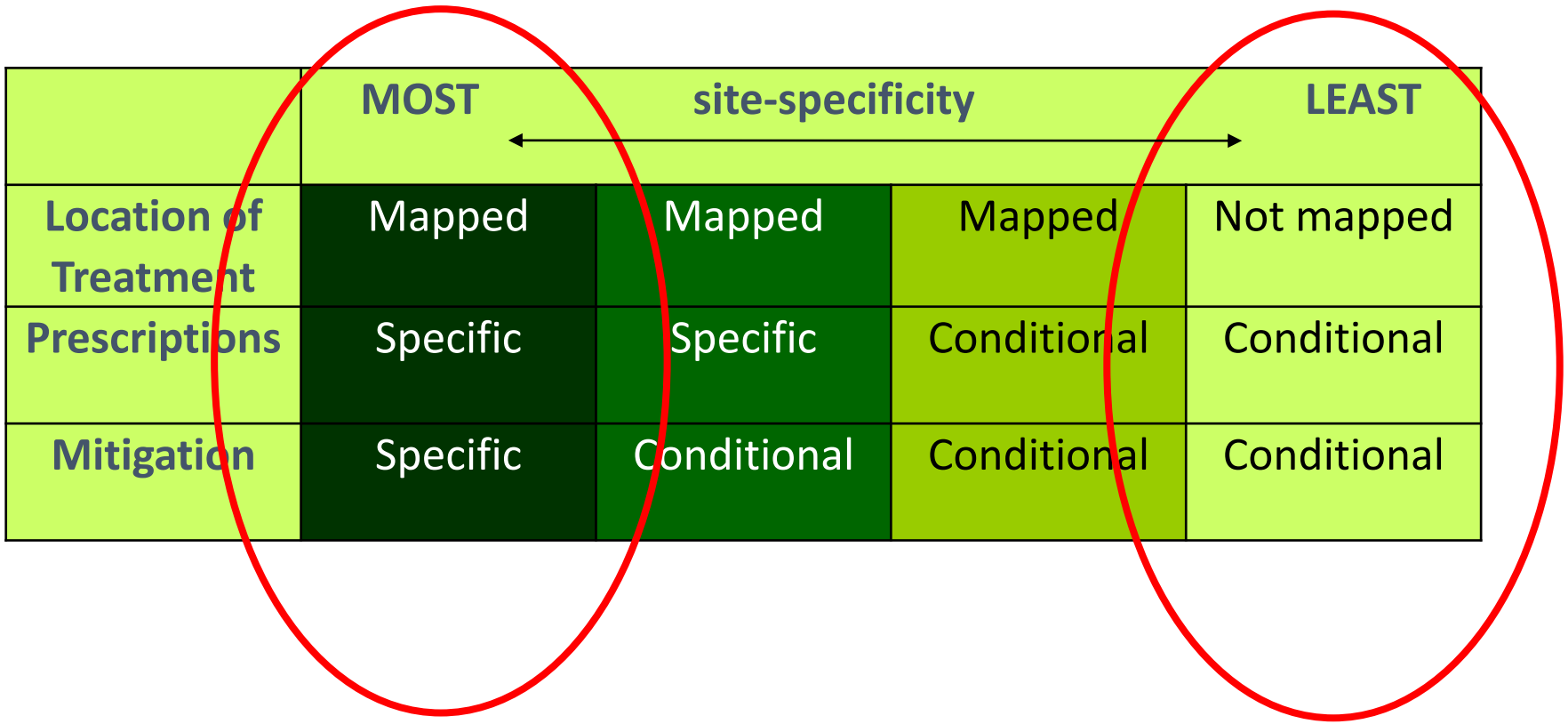
NEPA Analysis and Requirements for Site-specificity



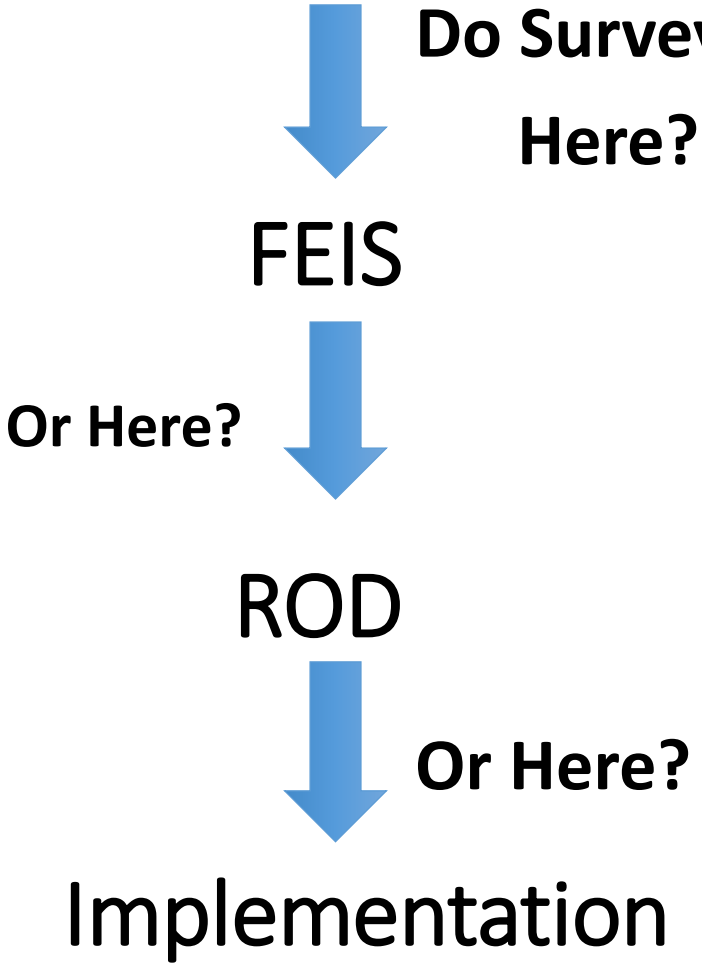
	MOST	site-specificity		LEAST
Location of Treatment	Mapped	Mapped	Mapped	Not mapped
Prescriptions	Specific	Specific	Conditional	Conditional
Mitigation	Specific	Conditional	Conditional	Conditional

Post Decision Validation / Pre-Implementation Work

Typical NEPA Process

Intensive resource surveys here

Re-survey due to changed conditions here



Condition-based NEPA Process

Minimal resource surveys here

Intensive resource surveys prior to Implementation – Fresh and Focused

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Examples of Field Check-lists That Others Have Developed

Table 1. Annual implementation checklist

Implementation Checklist	Details				
Project name:					
Project location (legal):					
Summary of activities proposed in this phase:					
Is the project located within the project boundary displayed in the FEIS/ROD?					
Identify the restoration unit (RU) in which the project phase is located based on the FEIS/ROD.	**RU1**	**RU3**	**RU4**	**RU5**	**RU6**
(1) How many acres have been treated by RU since the ROD was signed?					
(2) How many remaining acres are available for treatment by RU over the lifetime of the decision? (1–2)					
(3) How total many acres will this project (or task order) treat by RU?					
(4) Are the acres to be treated by RU less than remaining acres available for treatment? (3–4)					
Are acres proposed for treatment by RU within the limits approved by the decision?	**Yes**_____ **No**_____				

Table 3. NEPA, NFMA, ESA, CFLR Act compliance evaluation

Compliance Evaluation	Yes	No	Not Applicable
Is the project within the maximum treatment acres identified in the NEPA decision?			
Is treatment design consistent with desired conditions, design criteria, and mitigation?			
Are wildlife and botanical surveys, if necessary, complete? Is the action consistent with the FWS biological opinion dated_____?			
Are heritage surveys complete? Is the action consistent with the letter of concurrence form the AZ SHPO dated_____?			
Have contacts with tribal representatives been made?			
Are rights-of-way and land line locations in place (if applicable)?			
Are treatments consistent with the Old Tree Implementation Plan (Section C)			
Has the monitoring and adaptive management plan been evaluated to document compliance with law, regulation, policy, and forest plans?			
Have additional implementation and effectiveness monitoring needs been identified?			
As required by CFLR Act, is multiparty monitoring underway?			
Are adaptive management actions being proposed? If so, clearly analyzed and covered by the decision made?			
Has the administrator checklist been completed and signed by the appropriate resource specialists?			
Is the treatment (burn) plan completed and signed? • Objectives have been developed in interdisciplinary manner and are clearly delineated? • Objectives are consistent with management direction? • Objectives match those described for RU in NEPA analysis? Complexity rating_____			
Do conditions match those described in NEPA analysis? Examples where conditions have changed: New listed species in project area; New invasive species in project area; Change in regulations Burn/treatment plan doesn't allow implementing design criteria	YES___ ___	NO____ ___	
Have issues identified in the NEPA analysis been reviewed?			
Has a post-implementation review been completed (may be filled out after approval)?			
Alternative C Only: Are treatments consistent with Large Tree Implementation Plan? (Section D)			

Table 4. Supporting documentation checklist

Document Name	Attached? Y/N
Silviculture Prescriptions	
Burn Plan	
Transportation Safety Plan	
Wildlife Surveys	
Botany Surveys	
Archaeological Surveys	
Monitoring Results	

Project Resource Specialist Review

Based on my review, the project is consistent with the Coconino and Kaibab National Forests final environmental impact statement and record of decision (FEIS/ROD) implementing the Coconino and Kaibab NFs restoration project.

Name/Signature	Date	Resource Area
		Terrestrial and Aquatic Wildlife
		Botany
		Range
		Recreation
		Scenery
		Archaeology and Tribal Relations
		Fire
		Air Quality/Smoke
		Lands
		Soils and Hydrology
		Silviculture
		Planning/NEPA
		Transportation
		Public Affairs

Continued Public, Stakeholder, and Cooperating Agency Involvement

- Continue public engagement and collaborative learning that occurred during planning phase
- Support continuation of cooperating agency engagement
- Demonstrate compliance with management direction specified in decision
- Conduct a transparent implementation process that keeps the public and agencies informed of and involved in treatment unit timing, design, and monitoring
- Ensure integrated engagement of IDT members, field personnel, cooperators, line officers, and the public
- Focus on shared priorities and work to resolve concerns and solve problems related to selection and implementation of LaVA treatment units
- Conduct monitoring activities, interpret and share results, adapt implementation practices to improve results and better meet project objectives.

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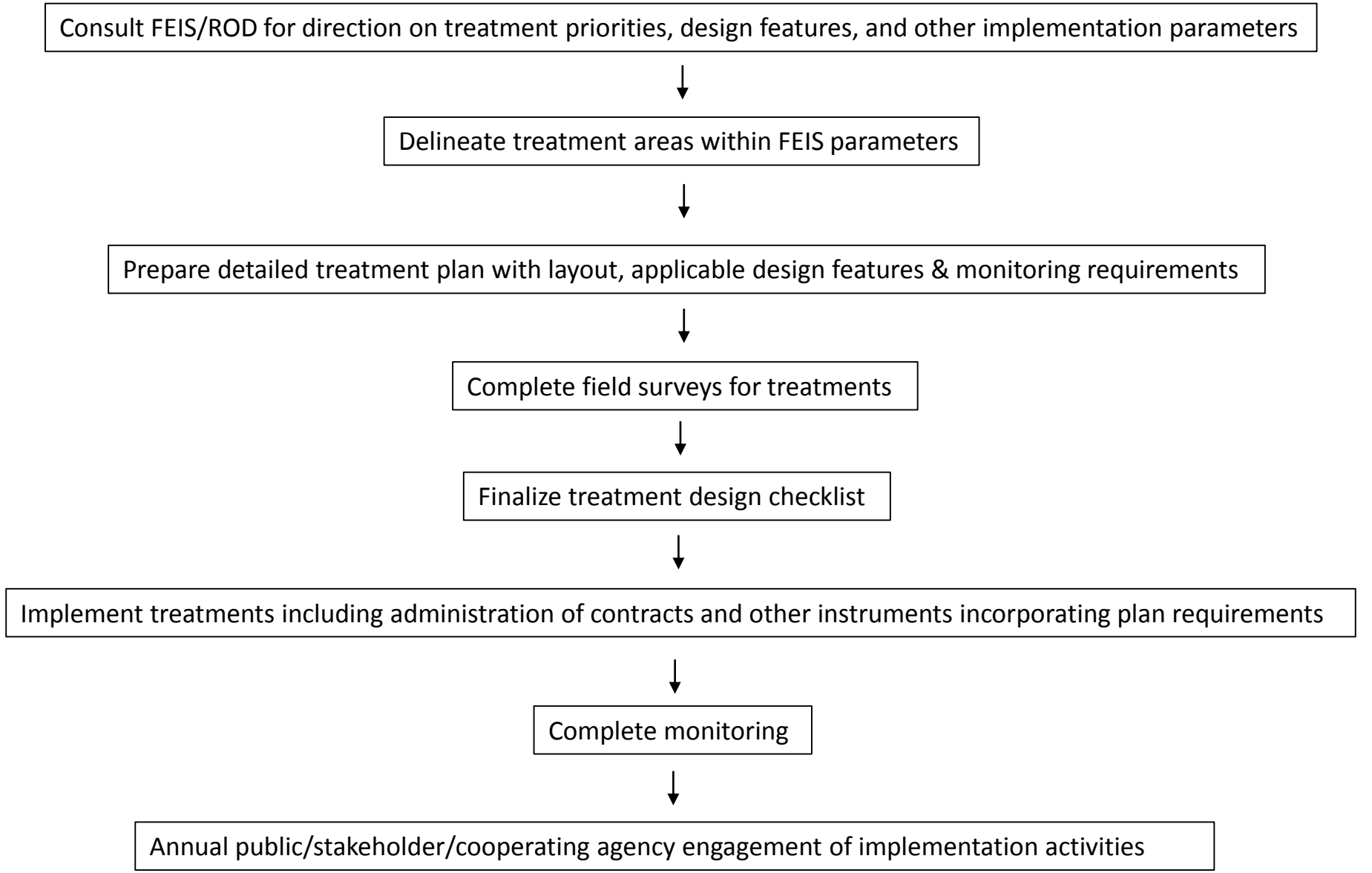
Possible Adaptive Implementation and Monitoring Process



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Medicine Bow LaVA Project Overview

- Project Boundary
- Healthy Forests Restoration Act (HFRA) and/or 2014 Farm Bill Authority
- Project Objectives and Preliminary Purpose and Need
- Analysis Process to Date: Coarse Filter Approach
- Where We're Headed: Mid-filter Approach
- Project Timeline

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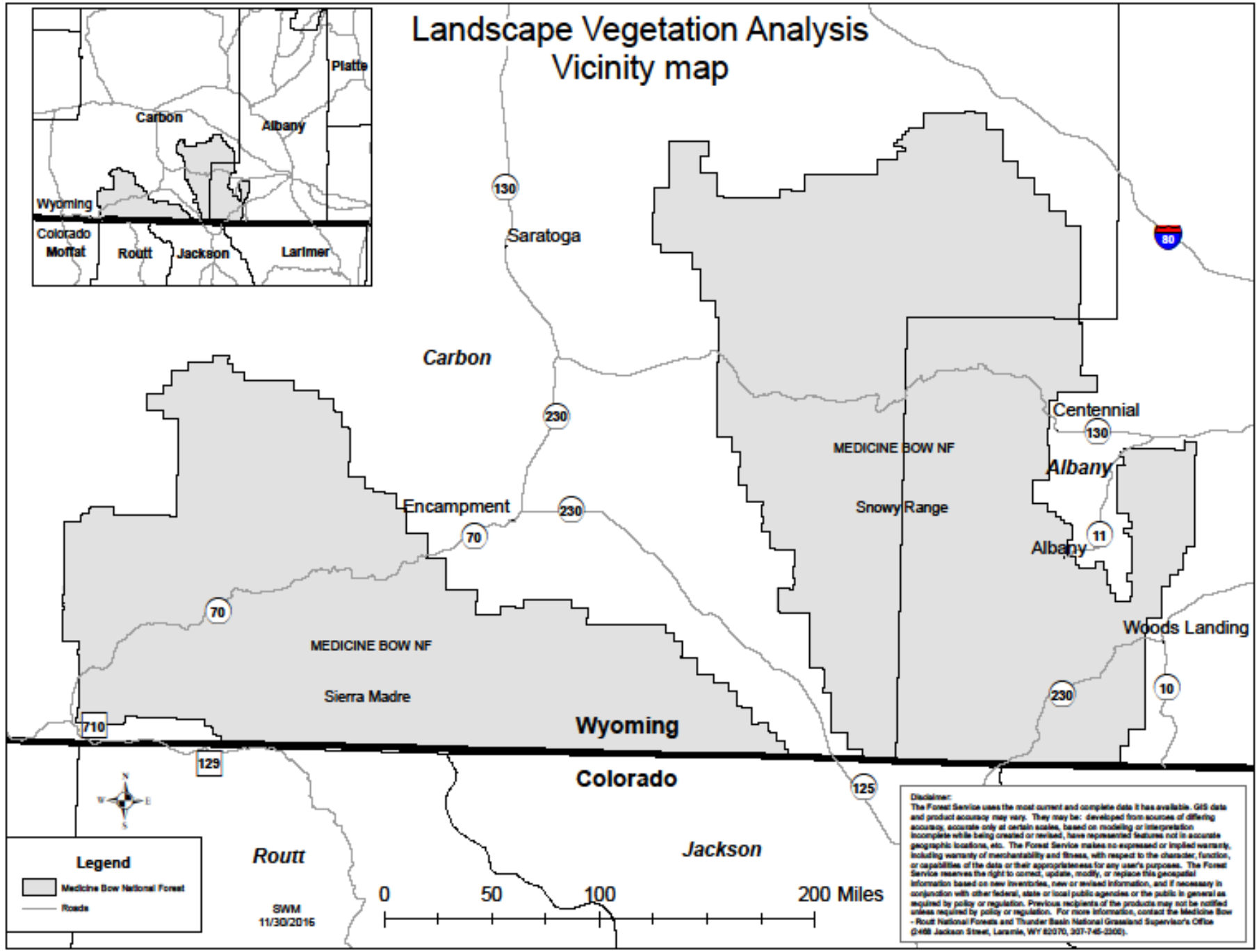
Landscape Vegetation Analysis
Vicinity map
Platte
Carbon
Albany
Wyoming
Colorado
Moffat
Routt
Jackson
Larimer
130
Saratoga
80
Carbon
230
Centennial
130
MEDICINE BOW NF
Albany
Snowy Range
Encampment
230
70
11
Albany
70
MEDICINE BOW NF
Woods Landing
Sierra Madre
230
10
710
Wyoming
129
Colorado
125
Routt
Jackson
Legend
Medicine Bow National Forest
Roads
0
50
100
200 Miles
SWM
11/30/2016
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HFRA or 2014 Farm Bill Amendment

The LaVA is “authorized” under Title I of the HFRA:

- Sec. 102(a)(1) - Federal land in wildland-urban interface areas;
- Sec. 102(a)(2) – Condition class 3 Federal land in proximity to municipal watersheds;
- Sec. 102(a)(3) – Condition class 2 Federal land, in fire regimes I, II, or III, in proximity to municipal watersheds;
- Sec. 102(a)(4) - Insects and disease epidemics; and
- Sec. 102(a)(5) – Federal land not covered by 1 – 4 containing threatened and endangered species habitat.

Portions of the LaVA are also authorized under the HFRA, Title VI (Section 8204, 2014 Farm Bill Amendment) - Section 602(d) – Designation of Treatment Areas

Entire area may be authorized in the near future.

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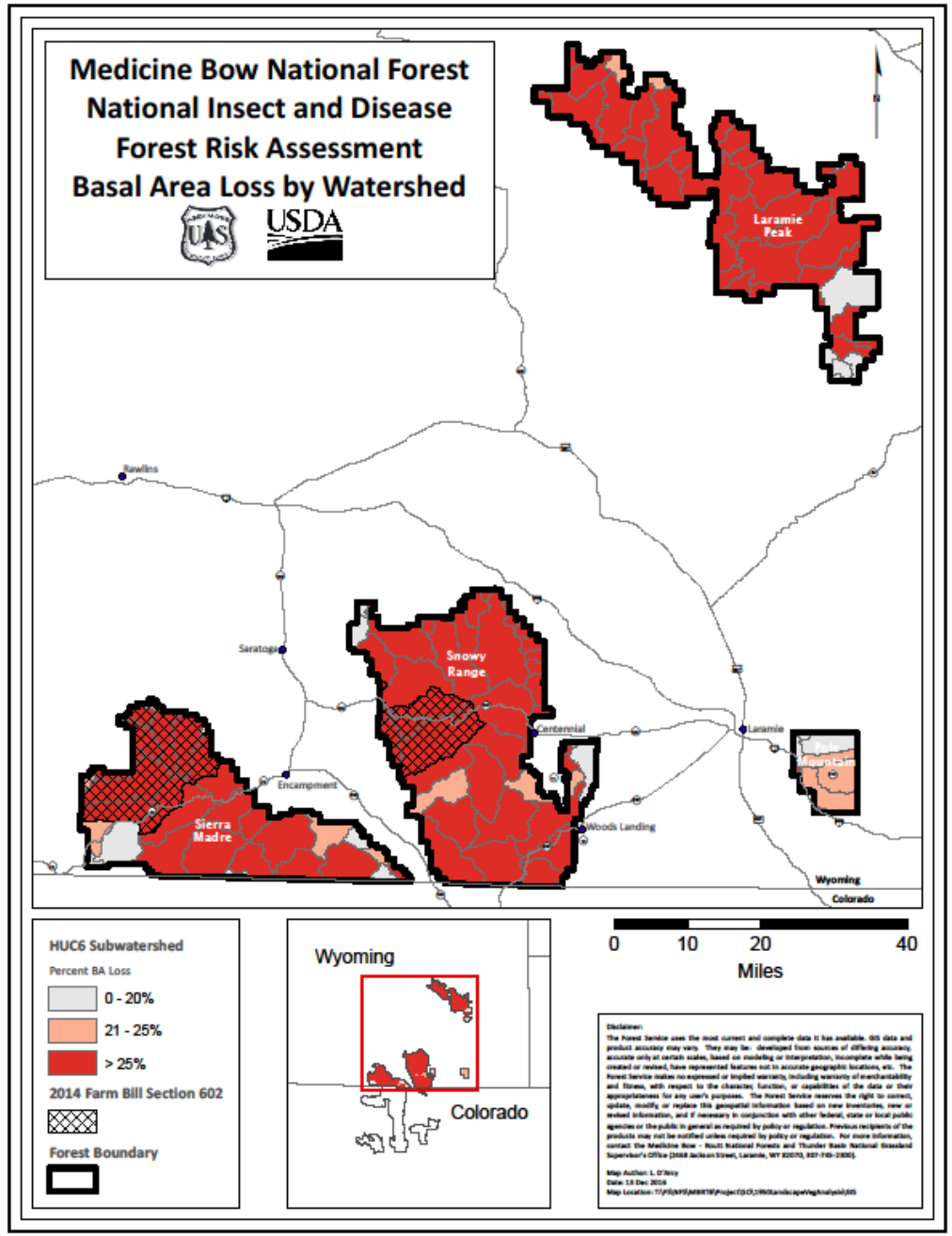
Medicine Bow National Forest
National Insect and Disease
Forest Risk Assessment
Basal Area Loss by Watershed
USDA
Laramie Peak
Rawlins
Saratoga
Snowy Range
Centennial
Laramie
Pole Mountain
Encampment
Sierra Madre
Woods Landing
Wyoming
Colorado
HUC6 Subwatershed
Percent BA Loss
0 - 20%
21 - 25%
> 25%
2014 Farm Bill Section 602
Forest Boundary
Wyoming
Colorado
0
10
20
40
Miles

Project Objectives

- Identify strategies to best mitigate the negative effects of the bark beetle epidemics on the Snowy Range and Sierra Madre mountain ranges.
- Use tree cutting and/or prescribed burning to:
  - make areas more resilient to future disturbance
  - Reduce fire hazards to communities and high-value resources; and
  - Provide a sustainable supply of wood and biomass consistent with sound forest management
- Accelerate the pace of forest restoration using innovative NEPA approaches and strong collaborative relationships

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Preliminary Purpose and Need

Project Purpose: To respond to declining forest conditions presented by the bark beetle epidemic by actively managing forest vegetation using tree cutting and/or prescribed burning, consistent with the goals outlined in the Governor's Task Force on Forests (Final Report, 2015), the Western Bark Beetle Strategy (July 2011), and the Wyoming Statewide Forest Resource Strategy (2010). These goals include promoting recovery from the insect infestations, improving the resiliency of green stands to future disturbances, helping to protect forested areas on adjacent private and state land, and providing for human safety. These general goals will be adapted to local landscapes where treatments are needed based on Forest Plan direction, foreseeable conditions, and local environmental, social, and economic concerns.

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Preliminary Purpose and Need (Cont'd)

Project Needs:

Enhance Forest Resiliency:

- Increase age class, structural, and tree species diversity to create multi-storied stand conditions of spruce-fir;
- Reduce the continuity of dead lodgepole pine, thereby increasing heterogeneity across the landscape; and
- Promote aspen regeneration to improve habitat conditions and loss of species diversity for wildlife.

Provide for Human Safety:

- Remove hazard trees in areas not covered by the Forest-wide Hazard Tree Decision Notice (August 12, 2008);
- Remove hazard trees within and outside the wildland urban interface (WUI);
- Increase the extent of defensible space around values at risk; and
- Provide safer locations from which firefighters can initiate fire management actions.

Provide for Protection of Infrastructure, Municipal Water Supplies, and TES Habitat:

- Remove hazard trees adjacent to fences, ditches, and other linear features;
- Manage hazardous fuel loadings adjacent to municipal water supplies; and
- Remove hazardous fuels where fire is identified as a threat to the habitat of a threatened species.

Mitigate Hazardous Fuel Loading:

- Remove and/or redistribute hazardous fuels to minimize the potential for large, high intensity/high severity wildfires; and
- Remove hazardous fuels to reduce fire behavior and the possibility of fires spreading onto adjacent, non-federal lands.

Provide for Recovery of Forest Products by:

- Promote vegetation management to recover merchantable products and to accelerate recovery and regeneration of forest stands; and
- Provide commercial forest products to local dependent industries at a level commensurate with Forest Plan direction and in harmony with other Forest Plan goals.

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Analysis Process to Date: Coarse Filter Approach

Objective: To determine the scope and scale of treatment opportunity area (TOA)

- **Forest Plan direction**
  - No mechanical treatment in Wilderness Areas, Research Natural Areas, Special Interest Areas, and Mapped and Inventoried Old Growth in Management Area (MA) 5.15 (Ecological Restoration)
  - No prescribed fire in Old Growth in MA 5.15
- **Law, regulation, and policy**
  - HFRA – no treatments of any kind in Wilderness Areas or Congressionally designated areas.
- **Administrative index of acceptable risk (i.e., Dennis's comfort level)**
  - No treatments of any kind in MA 1.2 (Recommended Wilderness)
  - Need strong justification for treatments in Inventoried Roadless Areas
  - Need strong justification for treating mapped and inventoried Old Growth outside of MA 5.15

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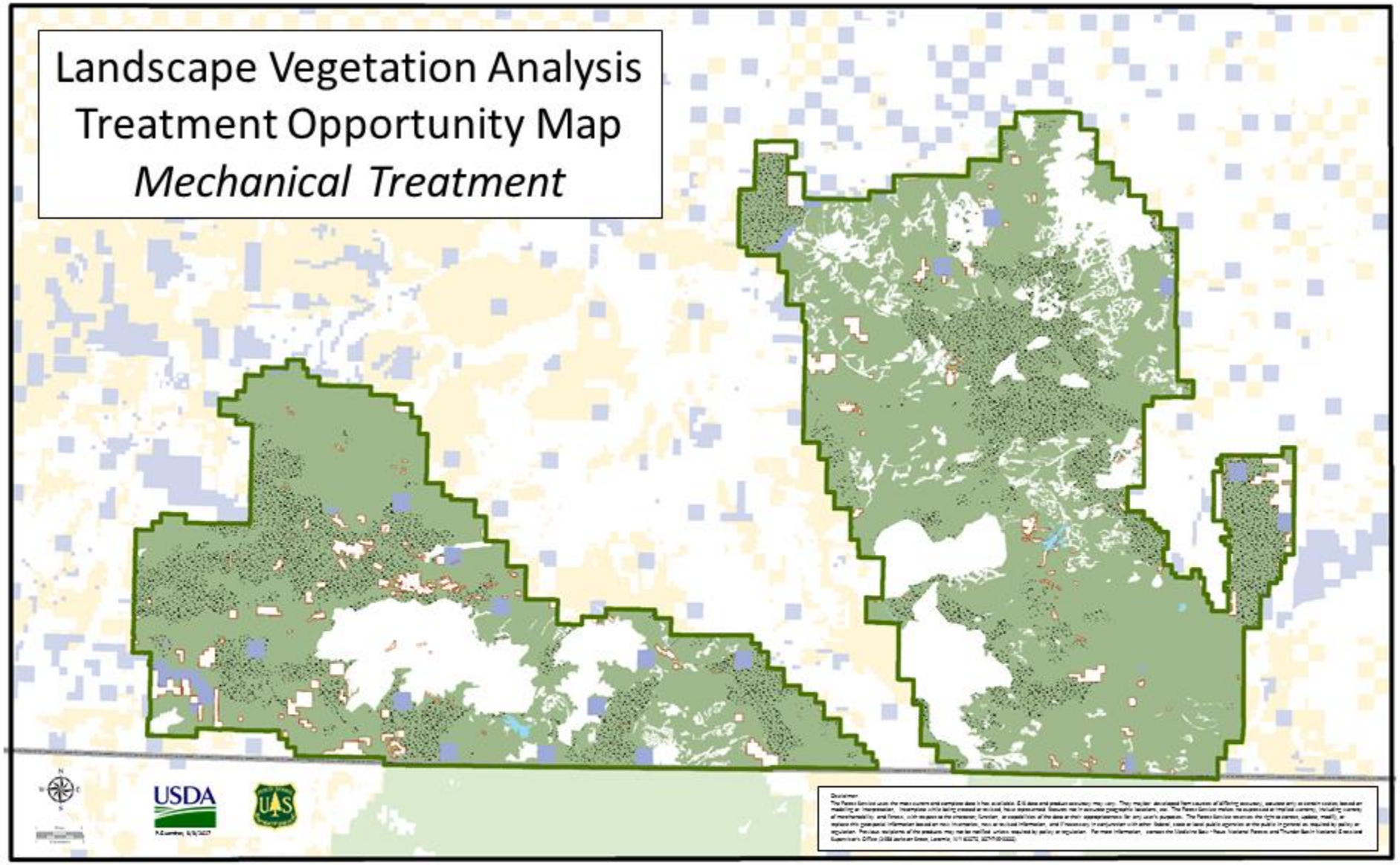
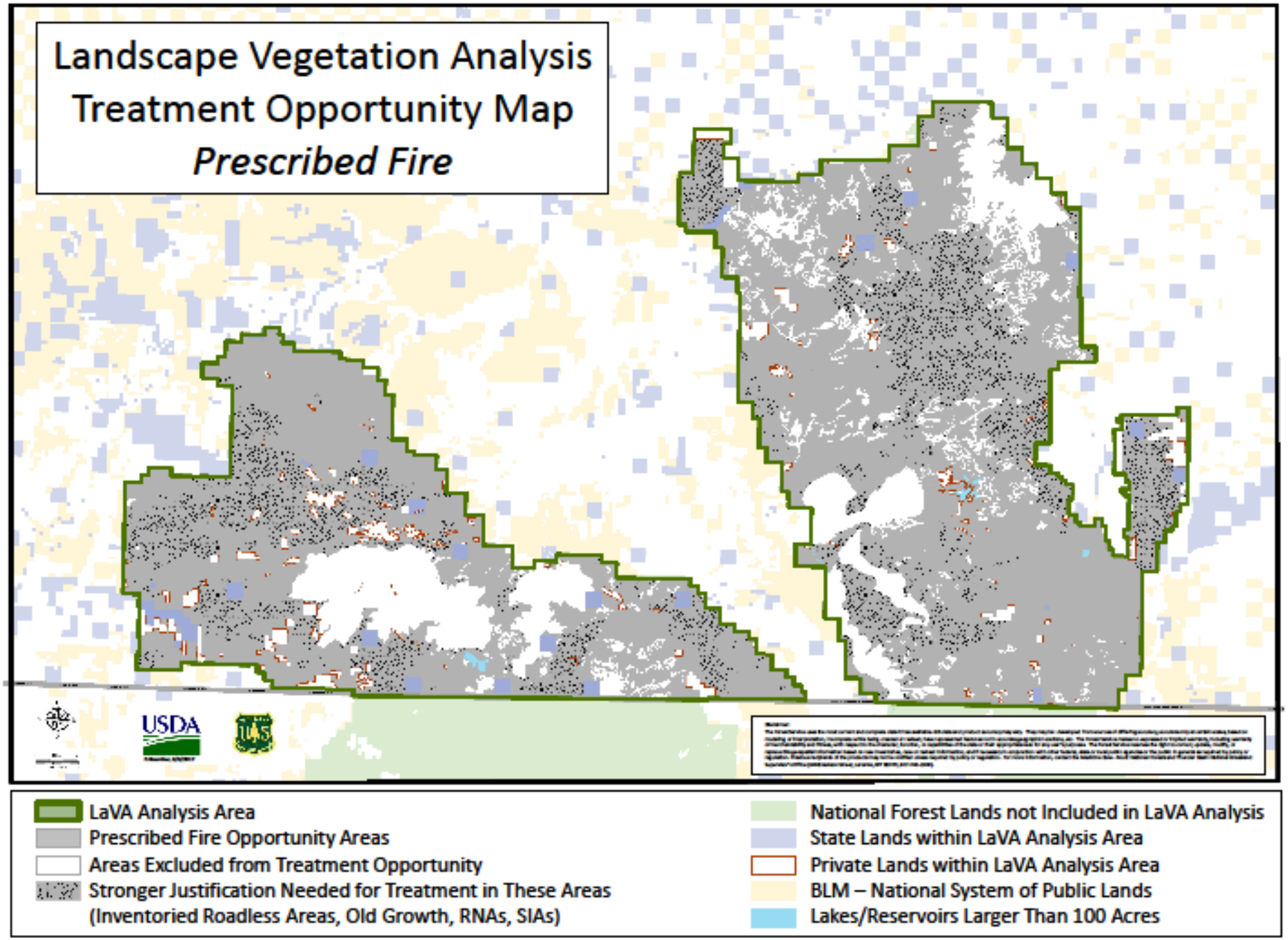
Landscape Vegetation Analysis
Treatment Opportunity Map
Mechanical Treatment



- LaVA Analysis Area
- Mechanical Treatment Opportunity Areas
- Areas Excluded from Treatment Opportunity
- Strong Justification Needed for Treatment in These Areas (Inventoried Roadless Areas & Old Growth >MA 5.15)
- National Forest Lands not Included in LaVA Analysis
- State Lands within LaVA Analysis Area
- Private Lands within LaVA Analysis Area
- BLM – National System of Public Lands
- Lakes/Reservoirs Larger Than 100 Acres


Landscape Vegetation Analysis
Treatment Opportunity Map
Prescribed Fire
USDA
LaVA Analysis Area
Prescribed Fire Opportunity Areas
Areas Excluded from Treatment Opportunity
Stronger Justification Needed for Treatment in These Areas
(Inventoried Roadless Areas, Old Growth, RNAs, SIAs)
National Forest Lands not Included in LaVA Analysis
State Lands within LaVA Analysis Area
Private Lands within LaVA Analysis Area
BLM – National System of Public Lands
Lakes/Reservoirs Larger Than 100 Acres

Where We're Headed: Mid-filter Approach

- **Forest Plan direction**
  - Standards and Guidelines
  - Desired Conditions
- **Law, regulation, and policy**
  - Southern Rockies Lynx Amendment and Lynx Analysis Units
  - Executive Orders
- **Past Management Activities**
- **Determining Appropriate Models to use**
  - Hydrology: Equivalent Clearcut Acres v. Equivalent Roaded Areas
  - LANDFIRE data, FireFamilyPlus, and FLAMMAP
- **Updating/Validating Existing Databases**
  - FSVeg Spatial
  - FACTS

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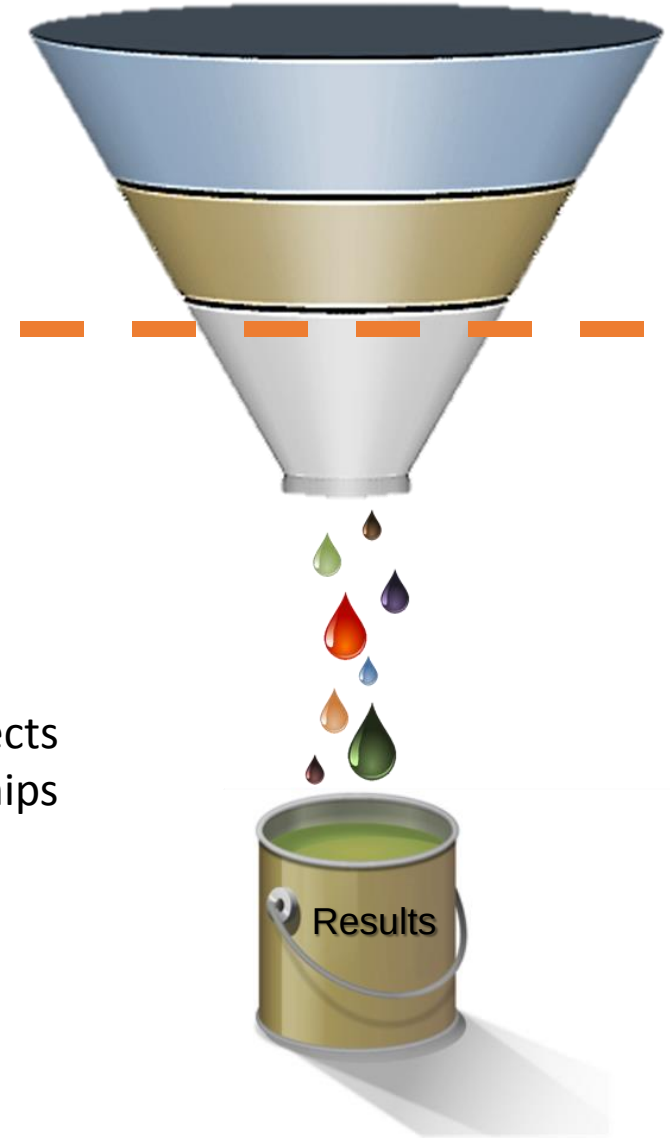
OPPORTUNITIES

(e.g., CARs, Cheyenne Municipal Watershed Wildfire Hazard Mitigation Assessment)

Places we want to work

Places we can work
Places where we should work

Most important places to work
Goals we want to work toward
Tools we can use in those places



Projects
Partnerships

Need to determine where the appropriate place is for this line to exist

CONSTRAINTS (i.e., FILTERS)

(e.g., LAUs, Hydrologic Cumulative Effects, Transportation System)

Places we can't work **(Coarse)**

Places we don't have support to work
Places social license is still needed

Limitations on access/distribution
Tradeoffs and conflicting goals
Limitations on using certain tools

Capacity
Authorities

Accelerated Project Timeline

Task	Accelerated Timeframe
Refine Proposed Action and Purpose and Need - GIS Analyses/Mapping Needs - Data/Personnel Gaps - Define Preliminary Treatment Opportunity Areas - Preliminary Design Criteria/BMPs/Mitigation - Develop Public Involvement Strategy	January - March 2017
Scoping - Public Meetings - Cooperator Meetings	April 2017
Content Analysis and Alternative Review/Development	May/June 2017
Treatment Opportunity Area (TOA) Field Review - Verify assumptions used to identify TOAs; - Verify assumptions used to identify proposed treatment parameters (e.g., levels of treatment; types of actions to propose (e.g., salvage, WUI protection; habitat protection); tools that might be used (e.g., mastication, burning, timber prescriptions))	July/**August** 2017
Analysis and Specialist Reports	**September** 2017
Draft Environmental Impact Statement (EIS)	**October** 2017
Formal Comment Period (45-days) - Public Meetings - Cooperator Meetings	Nov./**early Dec.** 2017
Content Analysis/Response to Comments	January/February 2017
Final EIS / draft Record of Decision / HFRA Objection Period (30 –day)	March 2018
Objection Resolution (30-day)	April 2018
Signed Decision / Implementation	May 2018

Let’s Take a Break!

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